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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,023	09/14/2000	Mi Young Kim	0630-11550P	9860

7590

08/04/2005

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT

PAPER NUMBER

2653

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/662,023	Applicant(s) KIM, MI YOUNG	
	Examiner Aristotelis M. Psitos	Art Unit 2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submissions filed on 5/16/05 and 11/29/04 have been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

1. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter, which applicant(s) regard as their invention.

In particular:

a) in claim 6, a means for discriminating, a means for transmitting and a means for performing disk-ejection are recited. However, the means for discriminating further recites the required sensing from a plurality of optical sensors and a disk loading switch, as well as that these are maintained for more than a predetermined time.

Neither the elements recited (optical sensors, or switch) nor the ability to appropriately designate elapsing of time is found in the claim.

b) claim 7 recites a means for discriminating and a means for performing. However, the first recited means requires the ability to sense signals from both a plurality of optical sensors and a loading switch. None of these elements have been properly claimed, hence this claimed means couldn't perform the desired functions so recited.

c) claim 8 recites the same limitation with respect to predetermined time but has not been properly established. That is the examiner concludes that the determination step requires at the very least a comparison between the recognition of the event(s) and a passage of time. The time period in figure 4 is not clear. Further elaboration is respectfully requested.

As far as the claim recite positive limitations, the following rejections are made.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art of figure 1 further considered with JP 60-136059 and both further considered with Scribner et al.

The following analysis is made:

Claim 7	acknowledged prior art of fig. 1.
A system for checking disk loading status	description as found on pages 1-3 of the
in an optical disk driver comprising:	specification
means for discriminating loading status	element 6, detects from the
of an optical disk during multiple	optical sensors 1 & 1 as well
loading stages of the disk	as the loading sw
including determining that the values	see the below analysis
of the sensing signals outputted from	
the plurality of optical sensors and a	
disk loading switch are maintained	

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for more than a predetermined time; and

means for performing a disk-ejection operation

JP 60-136059

in case that the disk has been jammed in the

optical disk driver based upon the discrimination.

As analyzed above the examiner interprets the term "conventional art" as prior art.

Hence the examiner respectfully requests applicant's cooperation in submitting further identification of such, i.e., publication, etc. in order to complete the search report as well as ascertain the scope of such element identified above.

There is no clear depiction that element 6 discriminates when such the appropriate optical and loading switch events are "maintained for more than a predetermined time". Nevertheless, that such events are recognized is considered present in this prior art.

JP 60-136059 discloses a method/system in the disc arts wherein if a particular condition is not detected, then an eject command is issued. See the abstract.

It would have been obvious to modify the base system of the acknowledged prior art with the above teaching from the JP reference in order for the recognition of "maintained for a predetermined time" condition as well as issuing an eject command. Motivation is to permit the ejection of the disk.

In meeting the last function of the above claim, it is noted that because the conditions of the discrimination have been met, the claimed "jammed" occurs.

Claim 4 is the method and such is considered met when the above system operates.

With respect to claim 5, the reporting of the disk-ejection to a "host" is considered present in the above combined systems, i.e., the "host" is considered the overall pc in the acknowledged prior art.

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Claim Rejections - 35 USC § 103

2. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al further considered with the acknowledged prior art and both further considered with JP 60-136059 and Scribner et al.

The following analysis is made:

Claim 6**Takahashi et al**

A system for checking disk loading status

abstract/title/ col.

in an optical disk driver comprising:

11 lines 29 to col.

13 line 15

means for discriminating loading status of

see figures 10 & 13

an optical disk during multiple loading stages

see acknowledged

of the disk including determining that the values

prior art

of the sensing signals respectively outputted

from a plurality of optical sensors and a disc

loading switch are maintained for more than

a predetermined time;

means for transmitting information to a host

see figure 10

connected through an interface to the optical disk

driver in case that the disk has been jammed based

on the discrimination; and

means for performing a disk-ejection operation

see JP document

according to a disk ejection command received from

the host.

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In the above analysis, Takahashi et al is a disc loading system that although uses both optical and load switching sensors, doesn't use a plurality of optical sensors. The acknowledged prior art teaches such for the inherent ability of sensing different sized discs.

It would have been obvious to modify the base system of Takahashi et al with the above teaching from the acknowledged prior art, motivation is to detect difference sized discs in the loader.

The Takahashi et al system does describe the determination of appropriate disc loading/presence and if such is not detected for a "predetermined time", i.e., not present.

Furthermore, the Takahashi et al system does communicate to a host through an interface device – see figure 10.

There is not clear designation of an "eject" command.

JP 60-136059 discloses a method/system in the disc arts wherein if a particular condition is not detected, then an eject command is issued. See the abstract.

It would have been obvious to modify the base system of Takahashi et al with the above teaching from the JP document, motivation is to permit the operator to know/be aware of inoperable/error conditions and have the system appropriately compensate for such.

With respect to a "jam" condition, because the sensed conditions have been established, the events recognized by the optical and load switch sensors, the "jam" must follow. Alternatively, Scribner teaches in this environment (floppy disc load) the ability to sense a jam condition – see col. 10 lines 7-11 for instance.

It would have been obvious to modify the above systems with the additional teaching from Scribner et al, motivation is to ensure proper system operation by sensing "jam" conditions. Users of the above system which require/permit the "loading" of a plurality of records would be sensitive to erroneous/fault conditions such as "jams".

With respect to method claim 1, such is met when the above systems operate.

3. Claim 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 above, and further in view of Kurosawa et al.

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Kurosawa et al teaches in this environment the additional ability of sensing/having a "disc" clamp state recognized.

It would have been obvious to modify the base system as relied upon above with such additional "disc clamp" state, motivation to ensure proper seating of the record upon the playback device.

With respect to claim 3, the examiner interprets the operation of the Scribner et al system as meeting this time limitation.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 above, and further in view of Abe et al.

With respect to claim 8, the Abe et al reference discusses with respect to figure 2 the ability to determine if appropriate "load" condition(s) are/is met for a predetermined time and recognition of such an occurrence.

It would have been obvious to modify the base system as relied upon above with respect to claim 1 and further modify such with the above teaching from Abe et al and hence perform the ejection at an appropriate time.

Conclusion

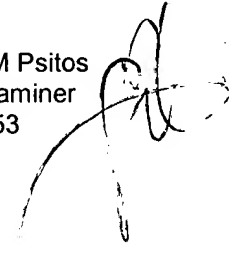
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos
Primary Examiner
Art Unit 2653



AMP